

AUTOMATED VIDEO PRODUCTION SYSTEM AND METHOD USING EXPERT VIDEO PRODUCTION RULES FOR ONLINE PUBLISHING OF LECTURES

Abstract of Disclosure

An automated system and method for producing videos using expert video production rules. The automated video production system and method of the present invention is particularly well-suited for the online publishing of lectures. The system of the present invention includes a camera system for capturing the lecture, such as an audience-tracking camera and a non-intrusive lecturer-tracking camera. Moreover, each camera may be controlled by a cinematographer. Tracking of a subject is performed using a history-based, reduced-motion tracker that sets up a camera shot based on the subject's movement history and leaves the shot fixed until the camera is switched. The system also includes a virtual director module having a probabilistic finite state machine (FSM) module that uses probabilistic rules and the expert video production rules to determine a current camera view.

Figures

Figure 1: A diagram illustrating the structure of a document. It shows a vertical sequence of elements: a title, a list of figures, and a list of tables. The title is at the top, followed by the list of figures, and then the list of tables. The list of figures is a vertical sequence of numbers, and the list of tables is a vertical sequence of letters. The diagram is a simple representation of the document structure.